



National Transportation Safety Board Aviation Accident Final Report

Location:	Palo Alto, CA	Accident Number:	WPR10CA230
Date & Time:	05/03/2010, 1100 PDT	Registration:	N796SP
Aircraft:	CESSNA 172S	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The certified flight instructor (CFI) reported that the student pilot, who was seated in the left seat, was performing a short field takeoff. The CFI said that during the takeoff, the airplane yawed left dramatically and became airborne in a nose-high attitude. The CFI reported that she took control and "pushed" forward on the yoke and regained control of the airplane; however, in the process, the airplane collided with an anemometer pole. The CFI reported that she was able to continue the flight, entered a non-standard pattern for the runway and landed without further incident. The airplane sustained substantial damage to the horizontal stabilizer; damage was also noted to the right wing. No pre accident mechanical deficiencies or anomalies with the airplane were reported.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's failure to maintain directional control and the certified flight instructor's delayed response to the student pilot's loss of control during the takeoff roll.

Findings

Aircraft	Directional control - Not attained/maintained (Cause)
Personnel issues	Delayed action - Instructor/check pilot (Cause)
	Incorrect action performance - Student pilot (Cause)
	Aircraft control - Student pilot (Cause)
Environmental issues	Pole - Contributed to outcome

Factual Information

History of Flight

Takeoff	Loss of control on ground (Defining event) Collision with terr/obj (non-CFIT)
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Flight Instructor Information

Certificate:	Flight Instructor; Commercial	Age:	45
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Without Waivers/Limitations	Last FAA Medical Exam:	07/29/2009
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	09/29/2009
Flight Time:	830 hours (Total, all aircraft), 690 hours (Total, this make and model), 711 hours (Pilot In Command, all aircraft), 39 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft)		

Student Pilot Information

Certificate:	Student	Age:	38
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without Waivers/Limitations	Last FAA Medical Exam:	05/26/2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	124 hours (Total, all aircraft), 9 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N796SP
Model/Series:	172S	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	172S8720
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	02/26/2010, Annual	Certified Max Gross Wt.:	2350 lbs
Time Since Last Inspection:	89 Hours	Engines:	1 Reciprocating
Airframe Total Time:	1714 Hours at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-360 SER
Registered Owner:	OPENSKY AIRWAYS LLC	Rated Power:	180 hp
Operator:	OPENSKY AIRWAYS LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	30 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.18 inches Hg	Temperature/Dew Point:	20° C / 13° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Palo Alto, CA (KPAO)	Type of Flight Plan Filed:	None
Destination:	Concord, CA (KCCR)	Type of Clearance:	VFR
Departure Time:	1100 PDT	Type of Airspace:	

Airport Information

Airport:	Palo Alto (KPAO)	Runway Surface Type:	Asphalt
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	2443 ft / 70 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	37.461111, -122.115000

Administrative Information

Investigator In Charge (IIC):	Dennis J Hogenson	Report Date:	07/22/2010
Additional Participating Persons:	Dalton L Mountz; FAA FSDO; San Jose, CA		
Publish Date:	07/22/2010		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=75955		

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